



Chapter

9

Special Wastes

Special Wastes - Anticipated Gaps in Waste Management, and SWMP Actions

This chapter presents the process used by the City to evaluate the current SWM system, project the future waste stream, identify anticipated gaps in waste management, and select SWMP actions for special wastes.

Special wastes are components of the City's solid waste stream that have unique collection, disposal, or recycling requirements. Special wastes generated in the City of Falls Church include hazardous wastes, household hazardous waste (HHW), regulated medical waste (RMW), used tires, used oil, used antifreeze, and batteries. The origin, quantities collected, disposal locations, materials, and current systems to handle these wastes are described in detail in Chapter 2.

This chapter discusses the gaps between the current special wastes programs and activities, and the future waste management needs for each special waste type. The chapter then presents the City's SWMP actions for special wastes over the next 20 years to address those gaps.

The City reviewed the current and future projections of special waste quantities over the SWMP planning period. Using these projections, the City assessed the changes in the special waste stream over the planning period and identified the critical areas requiring modification. Finally, the City selected SWMP actions that will close the gaps between its current SWM system and that required in the future.

Overview of the 20-Year Plan for the City's Special Wastes Management System

The City's current SWM programs and activities for special wastes, the gaps in waste management, and SWMP actions over the SWMP planning period are summarized in Table 9-1.

Table 9-1. Special Waste: Current Waste Management Activities, Anticipated Gaps in Waste Management, and SWMP Actions

Current Programs in the City	Anticipated Gaps	SWMP Actions
<ul style="list-style-type: none"> – Hazardous waste collection and disposal services provided by private firms – Household hazardous waste (HHW) collection program at Fairfax County's I-66 Transfer Station – Regulated Medical Waste (RMW) transported out of City for treatment and disposal – Used tires collected in the City are managed at Fairfax County's I-95 Landfill Complex; all tires are ultimately recycled at facilities outside the City – Used oil and antifreeze collection facilities at Fairfax County's I-66 Transfer Station recycling drop-off center and local service stations – Battery collection facilities at Fairfax County's I-66 Transfer Station recycling drop-off center and area stores 	<ul style="list-style-type: none"> – Additional 0.3 tons per year of HHW by 2025 – Additional 5 tons per year of RMW by 2025 – Additional 16 tons per year of used tires by 2025 – Additional 12 tons per year of used oil and 1 ton of used antifreeze by 2025 – Additional 1.1 tons per year of batteries by 2025 	<ul style="list-style-type: none"> – Continue using the current special wastes management system – Establish a HHW collection program in the City of Falls Church – Promote public/private recycling programs to increase special wastes recycling, including NiCad battery recycling – Improve public outreach and education

Hazardous Wastes

Current Programs

Private firms operating in the City collect, transport, and dispose of hazardous wastes generated in the City of Falls Church.

Assessment of Current and Future Needs

The City projects that the existing hazardous waste system will be sufficient to handle City-generated hazardous wastes over the SWMP planning period.

Household Hazardous Wastes

Much HHW is commingled with MSW and disposed.

Current Programs



Currently, City residents may dispose of their HHW at Fairfax County's HHW collection center at the I-66 Transfer Station. This service is provided free-of-charge to City residents. It is likely, however, that much of the HHW generated in the City is commingled with MSW and disposed of in residential trash containers.

The county's HHW collection center accepts HHW from residents only; hazardous waste from businesses is not accepted. The program was established to help prevent any potential hazardous wastes from entering the E/RRF or landfills. This facility is open year-round on Thursday afternoons, Friday mornings, and all day Saturday. A list of items accepted at the facility is shown in Chapter 2.

At the facility, hazardous wastes are identified, separated, and packed into appropriate containers. Fairfax County contracts with hazardous waste disposal companies for periodic collection and disposal of hazardous waste. Some non-hazardous latex paints inadvertently delivered by residents are diverted to the waste-to-energy facility — the Energy/Resource Recovery Facility (E/RRF) — for combustion.

The City of Falls Church promotes the use of the Fairfax County HHW program by City residents through its "Recycling Guide," City website, Recycling Hotline, and articles published bi-annually in the *FOCUS Weekly* section of the *Falls Church News-Press*. In addition, City residents often contact the City Recycling Coordinator directly to inquire about proper disposal of HHW.

Assessment of Current and Future Needs

Table 9-2 shows a conservative estimate of the quantity of HHW generated in the City of Falls Church over the SWMP period. The City based these estimates on historical per capita HHW collection rates in Fairfax County and future City population estimates.

Fairfax County's I-66 Transfer Station has the capacity to handle the projected quantities of HHW generated in the City of Falls Church over the next 20 years.

Table 9-2. City of Falls Church HHW Projections, 2004–2025 (tons)

2004	2005	2010	2015	2020	2025
1.9	2.0	2.1	2.1	2.2	2.2

Fairfax County's I-66 Transfer Station has the availability and capacity to handle the projected amount of HHW generated in the City of Falls Church over the SWMP planning period.

Regulated Medical Waste

Current Programs



Currently, all commercially generated RMW in the City is transported outside the City for treatment and disposal by properly licensed commercial waste disposal facilities. The identity and capacity of these facilities is not known. Home-generated medical waste is not regulated and may be disposed of with other MSW.

Assessment of Current and Future Needs

Table 9-3 shows the City's estimate of RMW generation volumes over the SWMP planning. These estimates are based on historical per capita generation rates and future City population estimates.

Table 9-3. City of Falls Church RMW Projections, 2004–2025 (tons)

2004	2005	2010	2015	2020	2025
34	34	36	37	38	39

RMW generated in the City will likely continue to be transported outside the City for treatment and disposal.

Used Tires

Current Programs

Used tires are collected by the City and by private haulers from auto shops and transported to Fairfax County's I-95 Landfill Complex. All tires are transferred to the back pad at the I-95 Landfill Complex and subsequently transported to tire recyclers. An unknown quantity of used tires is also transported directly to recycling facilities, bypassing the City collection facilities.

Assessment of Current and Future Needs

Table 9-4 shows the City's estimate of used tire generation volumes over the SWMP planning period. These estimates are based on historical per capita generation rates and future City population estimates.

Table 9-4. City of Falls Church Used Tire Projections, 2004–2025 (tons)

2004	2005	2010	2015	2020	2025
104	105	112	115	118	120

Fairfax County's I-95 Landfill Complex has the capacity to handle the projected quantities of used tires generated in the City of Falls Church over the next 20 years.

Fairfax County's I-95 Landfill Complex has the availability and capacity to store and transfer the projected quantities of used tires generated in the City of Falls Church over the SWMP planning period.



Used Oil and Antifreeze

Used oil and antifreeze are collected at Fairfax County's I-66 Transfer Station, City auto shops, and City motor pools.

Current Programs



City-generated used oil and antifreeze are currently accepted at no charge at the citizen's drop-off centers at Fairfax County's I-66 Transfer Station, as well as by private collection firms and recycling firms that service auto shops and motor pools.

Assessment of Current and Future Needs

Table 9-5 shows the City's estimate of used oil and antifreeze generation volumes over the SWMP planning period. These estimates are based on historical per capita generation rates and future City population estimates.

Table 9-5. City of Falls Church Used Oil and Antifreeze Projections, 2004–2025 (tons)

Item	2004	2005	2010	2015	2020	2025
Used oil	79	80	85	87	90	91
Antifreeze	10	10	10	11	11	11

Fairfax County's I-66 Transfer Station has the capacity to handle the projected quantities of used oil and antifreeze generated in the City of Falls Church over the next 20 years.

Fairfax County's I-66 Transfer Station recycling drop-off center has the availability and capacity to handle the projected quantities of used oil and antifreeze generated in the City of Falls Church over the SWMP planning period.

Batteries

Current Programs

City-generated used batteries are currently accepted at local battery retailers and at Fairfax County's I-66 Transfer Station. Used batteries include batteries used in cars, trucks, lawnmowers, and motorcycles as well as some household batteries, such as button, rechargeable (NiCad), mercury, and lithium. All other household batteries are disposed of with the MSW stream.

Assessment of Current and Future Needs

Table 9-6 shows the City's estimate of battery generation volumes over the SWMP planning period. These estimates are based on historical per capita generation rates and future City population estimates.



Fairfax County's I-66 Transfer Station has the capacity to handle the projected quantities of used batteries generated in the City of Falls Church over the next 20 years.

Table 9-6. City of Falls Church Battery Projections, 2004–2025 (tons)

2004	2005	2010	2015	2020	2025
7.2	7.2	7.7	7.9	8.1	8.3

Increased efforts are needed to remove additional amounts of NiCad rechargeable batteries from the waste stream and dispose of them properly. Fairfax County's I-66 Transfer Station recycling drop-off center has the availability and capacity to process the projected quantities of batteries generated in the City of Falls Church over the SWMP planning period.

SWMP Actions

Table 9-9 shows the City's SWMP actions for special wastes. The City selected SWMP actions based on their alignment with the SWMP goals (in Chapter 4) and their ability to close the gaps between the City's current SWM system and that required in the future. These SWMP actions are discussed in more detail in Chapter 11.

Table 9-9. City of Falls Church Special Wastes SWMP Actions

Special Wastes SWMP Actions
– Continue using the current special wastes management system
– Establish a HHW collection program in the City of Falls Church
– Promote public/private recycling programs to increase special wastes recycling, including NiCad battery recycling
– Improve public outreach and education